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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,067	02/26/2004	Yasushi Hattori	Q79667	3958

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EXAMINER

RICKMAN, HOLLY C

ART UNIT PAPER NUMBER

1773

DATE MAILED: 05/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/786,067

Applicant(s)

HATTORI ET AL.

Examiner

Holly Rickman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 5 and 6 is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The rejections of claims 1-12 under 35 U.S.C. 112, second paragraph, are withdrawn in view of Applicant's amendments.

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-4 and 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saitoh et al. (U5 6127039) in view of Murray et al. (U5 6254662).

Saitoh et al. teach a magnetic recording medium having a non-magnetic base layer coated on each side with a layer of non-magnetic coating mix wherein each non-magnetic coating layer is further coated with a magnetic layer containing a FePt alloy magnetic powder (see abstract and col. 12, lines 18-21; col. 16, lines 25-42). The reference fails to teach that the FePt powder has the claimed CuAu/Cu<sub>3</sub>Au ordering.

Murray et al. teach that it is known in the art to use FePt binary alloy particles in order to provide particulate magnetic media exhibiting narrower transitions and reduced read back noise (column 1, lines 55- 60). More specifically, Murray et al. detail the use of FePt particles having a

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CuAu crystal structure deposited on a substrate to form thin film media (column 2, lines 25-40).

See also col. 6, lines 49-51 for particle size set forth in claims 3-4 and 9).

It would have been obvious to one of ordinary skill in the art to substitute the FePt, CuAu-type particles taught by Murray et al. for the FePt based magnetic particles taught by Saitoh et al. in order to provide a medium exhibiting narrower transitions and higher read output as suggested by Murray et al.

#### ***Allowable Subject Matter***

3. Claims 5-6 are allowable. The closest prior art as applied above, fails to teach or suggest the claimed Hc ratios.

#### ***Response to Arguments***

4. Applicant's arguments filed 3/15/05 have been fully considered but they are not persuasive.

Applicant argues that Saitoh discloses a single base (i.e., support) which is coated on each side with a non-magnetic layer. Applicant argues that this is a "single support design" and does not meet the claim limitations directed to a first and second support.

The Examiner respectfully disagrees. The term "support" has been assigned its plain meaning in the absence of any specific definition in the specification. Thus, the term "support" has been interpreted to mean a layer serving as a foundation for another. Thus, the layers coated on the base layer taught by Saitoh would satisfy this limitation. It appears that Applicant is

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assigning the term “support” with a narrower definition that does not appear to be set forth in the specification.

Applicant also argues that Saitoh teaches the formation of Fe alloys with Pt along with other elements which do not form CuAu or Cu<sub>3</sub>Au type alloys. As such, Applicants state that “it would not have been obvious...to select platinum or palladium, which form a CuAu-type alloy with iron, and to combine these elements with the disclosure of the Murray reference.”

The examiner respectfully disagrees. The group of elements suitable for alloying with Fe as disclosed by Saitoh is small enough that one of ordinary skill in the art would have envisaged an embodiment using FePt. Given the teaching of using FePt, one of ordinary skill in the art would have been led to Murray which is also directed to FePt.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Holly Rickman whose telephone number is (571) 272-1514. The examiner can normally be reached on Monday-Friday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on (571) 272-1284. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Holly Rickman', with a stylized flourish at the end.

Holly Rickman  
Primary Examiner  
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